

Coaxial Low Pass Filter

VLF-2500+

50Ω *DC to 2500 MHz



Generic photo used for illustration purposes only

CASE STYLE: FF704

| Connectors | Model |
|------------|-----------|
| SMA | VLF-2500+ |

+RoHS Compliant

The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

Maximum Ratings

| | |
|----------------------------|-------------------|
| Operating Temperature | -55°C to 100°C |
| Storage Temperature | -55°C to 100°C |
| RF Power Input* | 10W max. at 25°C |
| DC Current Input to Output | 0.5A max. at 25°C |

* Passband rating, derate linearly to 3.5W at 100°C ambient. Permanent damage may occur if any of these limits are exceeded.

Features

- rugged uni-body construction, small size
- 7 sections
- excellent power handling, 10W
- temperature stable
- low cost
- protected by U.S. Patent 6,943,646

Applications

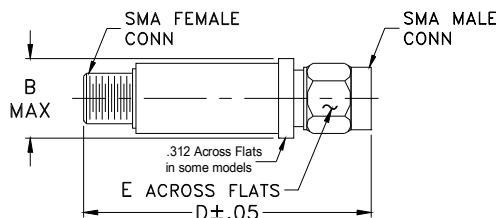
- harmonic rejection
- transmitters/receivers
- lab use

Electrical Specifications at 25°C

| PASSBAND (MHz) | fco, MHz Nom. (loss 3 dB) | STOP BAND (MHz) (loss, dB) | | | VSWR (:1) | | NO. OF SECTIONS |
|----------------------------|---------------------------|----------------------------|-----------|-------|-----------|----------|-----------------|
| | | f 20 | 30 | fr 20 | Stopband | Passband | |
| Max. | Typ. | Min. | Typ. | Typ. | Typ. | Typ. | |
| *DC-2400 (loss < 1 dB) | 3075 | 3675 | 3800-6100 | 8000 | 20 | 1.2 | 7 |
| *2400-2500 (loss < 1.2 dB) | | | | | | | |

* Not for use with DC voltage at input and output ports

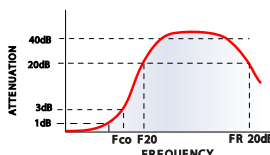
Outline Drawing



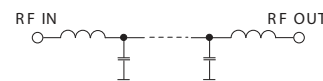
Outline Dimensions (inch/mm)

| B | D | E | wt |
|-------|-------|------|-------|
| .410 | 1.43 | .312 | grams |
| 10.41 | 36.32 | 7.92 | 10.0 |

typical frequency response

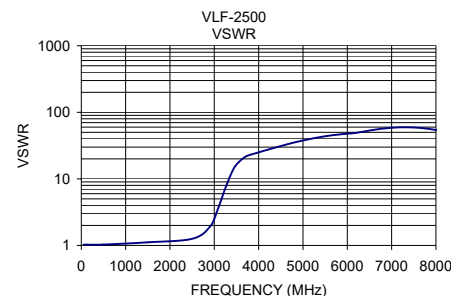


electrical schematic



Typical Performance Data at 25°C

| Frequency (MHz) | Insertion Loss (dB) | VSWR (:1) |
|-----------------|---------------------|-----------|
| 50 | 0.07 | 1.03 |
| 500 | 0.18 | 1.03 |
| 1500 | 0.38 | 1.11 |
| 2500 | 0.77 | 1.26 |
| 2900 | 1.77 | 1.91 |
| 3075 | 3.71 | 3.43 |
| 3250 | 7.85 | 7.25 |
| 3450 | 14.79 | 14.74 |
| 3675 | 24.24 | 20.95 |
| 3800 | 29.61 | 22.87 |
| 5000 | 37.24 | 37.77 |
| 6100 | 31.81 | 48.26 |
| 8000 | 22.21 | 54.29 |
| 15000 | 19.62 | 4.36 |
| 20000 | 15.64 | 13.29 |



Notes

- Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
- The parts covered by this specification document are subject to Mini-Circuit's standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuit's website at www.minicircuits.com/MCLStore/terms.jsp

